

**Work Order ID 51931**

Wednesday, September 09, 2009 11:37:42 A



Page 1

Item ID: D2741

Accept



Setup Start



Revision ID: C

Stop



Item Name: Blade, 350 Skidtube

Start Date: 9/10/2009 Start Qty: 40.00



Cust Item ID:

Required Date: 9/25/2009 Req'd Qty: 40.00



Customer:

Reference:

Approvals: Process Plan: *RL MP*

Date: 09-09

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D2741	Rev C

100



BAND SAW

Bandsaw

Jeaspa Bandsaw

0.00

*DJP 09/09/30*

40

110



HAAS CNC VERTICAL MACHINING #1

HAAS 1

HAAS CNC vertical machine #1

0.00

*DJP 09/09/30 / J.A 09/10/01*

40

120



QC2- Inspect parts off machine FAI/FAIB

QC

Quality Control

0.00

*DJP 09/09/30*

40

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Page 2

Item ID: D2741

Accept



Setup Start



Revision ID: C

Stop



Item Name: Blade, 350 Skidtube

Start Date: 9/10/2009 Start Qty: 40.00



Cust Item ID:

Required Date: 9/25/2009 Req'd Qty: 40.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_

Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

130



QC

Quality Control

QC8- Inspect parts - second check

0.00

0.00

28 09/10/03

40

140



Small Fab

Small Fab

0.00

0.00

28 09/10/05

40

8

150



Quality Control

QC5- Inspect part completeness to step on W/O

0.00

0.00

28 09/10/05

counts

40

8



**Work Order ID 51931**

Page 4

Wednesday, September 09, 2009 11:37:42 A

Item ID:	D2741	Accept		Setup	Start		
Revision ID:	C				Stop		
Item Name:	Blade, 350 Skidtube						
Start Date:	9/10/2009	Start Qty:	40.00		Cust Item ID:		
Required Date:	9/25/2009	Req'd Qty:	40.00		Customer:		
Reference:							
Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
						Stop	
QC:		Date:	SPC (Y/N):	Date:			

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190 	Small Fab  Small Fab  Small Fab	0.00  0.00	<i>N/A</i>						
200 	White Gloss(Ref:4.3.5.2) per QSI005 4.3-Steel  Powdercoat  Powder Coating	0.00  0.00	<i>N112260</i>	0.00  9:15AM 9:15AM	OVEN TEMPERATURE: 400°F  PRESSURE-WASH	40	0		
210 	QC3- Inspect Part Finish  Quality Control	0.00  0.00	<i>BL</i>	09-10-21		40			



# Picklist Print

Page 1

Wednesday, September 09, 2009 11:37:51 AM

Work Order ID: 51931



Parent Item: D2741RevC



Parent Item Name: Blade, 350 Skidtube

Start Date: 9/10/2009

Required Date: 9/25/2009

Comments:

Start Qty: 40.00

Required Qty: 40.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
M4130NB0.500X03.00 0		Purchased		No		100	f	80.7400	48.5937			

4130 Bar 0.500 x 3.00



<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
MAT	80.74	
- 107935	24	<i>DTT</i>
110336	21.54	<i>09/09/30</i>
- 110860	35.2	<i>14' → 10.5" SCRAP</i>
		<i>35.2 → 11.5" SCRAP</i>

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	<b>51931</b>
<b>Description:</b> Blade	<b>Part Number:</b>	<b>D2741</b>
<b>Inspection Dwg:</b> D2741 <b>Rev:</b> C		<b>Page 1 of 1</b>

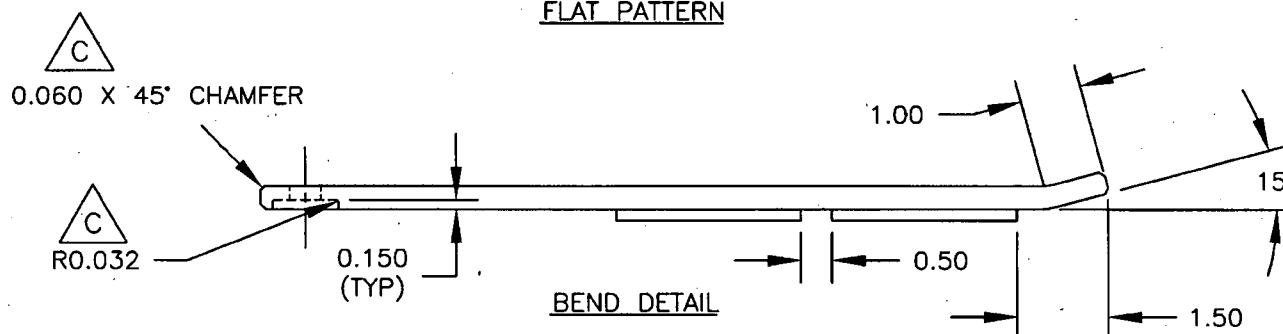
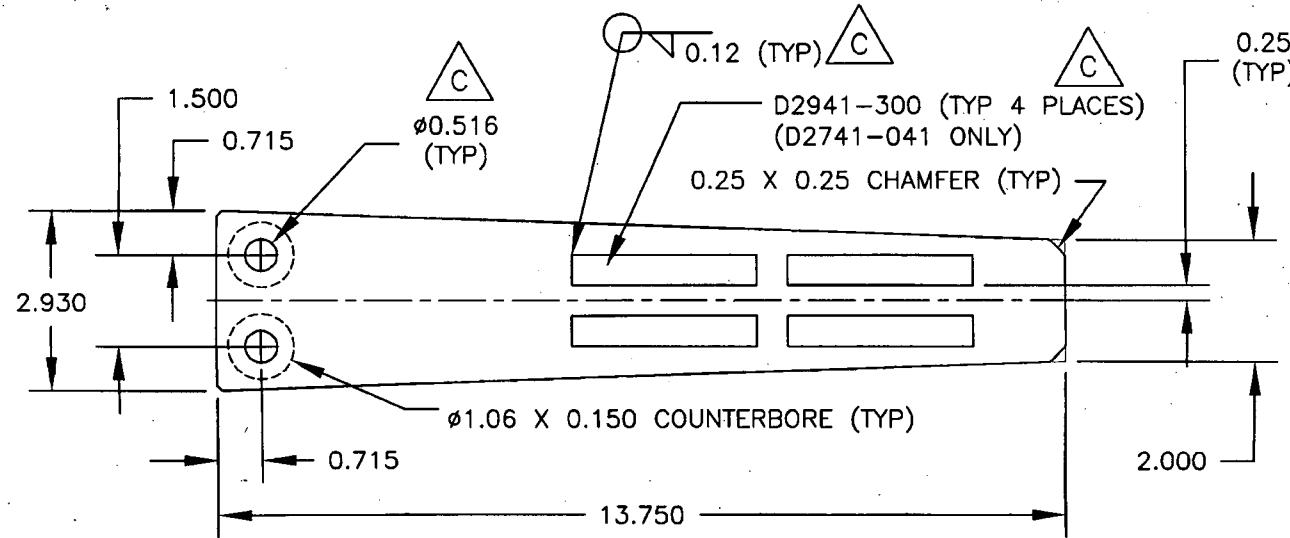
# FIRST ARTICLE INSPECTION CHECKLIST

X First Article  Prototype

Measured by:		Audited by:		Prototype Approval:	N/A
Date:	09/09/03	Date:	09/10/03	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	03.12.22	New Issue	KJ/RF	
B	06.03.09	Revised per Rev. C	KJ/JLM	

**DART**



D2741 BLADE

- 1) MATERIAL: AISI 4130 STEEL 0.375 THICK  
MIN. ULTIMATE TENSILE STRENGTH = 152 ksi (34-40 HRC)  
MIN. YIELD TENSILE STRENGTH = 141 ksi
- 2) FINISH: POWDER COAT WHITE (REF. 4.3.5.2) PER DART QSI 005 4.3
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES 0.030 TO 0.060
- 6) TO MAKE D2741-041, WELD D2941-300 (4) AS SHOWN ABOVE.  
REMOVE POWDER COAT FROM SURFACE OF D2941-300
- 7) TO MAKE D2741-043, WELD 7560 HARDCOAT ROD INSTEAD OF D2941-300

UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 3193

SHOP COPY  
RETURN TO  
ENGINEERING

DESIGN	DRAWN BY	DART AEROSPACE USA, INC.
<u>P4</u>	<u>MH</u>	PORT HADLOCK, WA
CHECKED	APPROVED	DRAWING NO.
<u>M</u>	<u>MH</u>	D2741
DATE		SCALE
06.01.12		1:3
A	98.04.16	NEW ISSUE
B	98.09.01	CHANGE C'SINK TO C'BORE
C	06.01.12	LARGER HOLE, ADD RADIUS AND CHAMFER ADD -041/-043 OPTIONS
		SHEET 1 OF 1



560, boul. Arthur-Sauvé  
St-Eustache (Québec) J7R 5A8  
Tél.: (450) 473-1884  
Fax Administration: (450) 491-5498  
Fax Production : (450) 491-6454

## Rapport d'inspection

Order	Load
151802	1

Customer 215  
DART AEROSPACE  
1270 ABERDEEN  
HAWKESBURY ON K8A 1K7

Shipped To:  
DART AEROSPACE  
1270 ABERDEEN  
HAWKESBURY ON K8A 1K7

Customer PO / PO du Client	Customer Shipper No.	Material Type / Material	Matl Heat Code	Lot Number
10534		4130		

### PROCESSING SPECIFICATIONS

SEL HARDEN  
HARDEN AND TEMPER  
SAE AMS 2758/1 REV D

Requirement	Specified	Tests Performed	Test Results
HARDNESS	34 - 40 HRC	40	38 - 40 HRC
TENSILE (KSI)	152 - 182 KSI		171 - 182 KSI

Quantity	Weight	Part Number / Part Description
40	141	D2741 BLADE DWG D2741 REV. C 2 BOITES DE CARTON

S  
61/10/20

### COMMENTS

INSPECTOR:



DATE: 2009-10-14

# METCOR INC.

560 BOUL. ARTHUR-SAUVÉ  
ST-EUSTACHE, QC J7R 5A8  
Tel: 450-473-1884 / Fax: 450-491-5498

Recu de Livraison

Order	Shipper	Shipping Seq.
151802	1	35678

Shipped Complete

Customer 215

DART AEROSPACE  
1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
Ph: 613-632-5200  
Fax: 613-632-1053

Shipped To:

DART AEROSPACE  
1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
Ph: 613-632-5200  
Fax: 613-632-1053

Purchase Order Number -	Customer Shipper-No.	Material Type	Order Date	Carrier
10534		4130	2009/10/7	PUROLETTER
Quantity	Part No. / Part Name / Part Description			Pounds
40	D2741 BLADE DWG D2741 REV. C 2 BOITES DE CARTON			141,

Container Type	# Of Containers	Container Comments
BOITE DE CARTON	2	

PACKING	
---------	--

Quantity Shipped: 40 ✓  
Pounds Shipped: 141,00  
Quantity Remaining: 0  
Pounds Remaining: 0,00

Quantity Shipped:	40
Pounds Shipped:	141,00

Signature:

Date:

Shipped ON: 2009/10/14



**METCOR INC.**

560 BOUL. ARTHUR-SAUVÉ  
ST-EUSTACHE, QC, J7R 5A8

Tel: 450-473-1884 / Fax: 450-491-5498

# Certification

Order	Load
151802	1

Customer 215

DART AEROSPACE  
1270 ABERDEEN  
HAWKESBURY

ON K6A 1K7

Shipped To:

DART AEROSPACE  
1270 ABERDEEN

1

HAWKESBURY

ON K6A 1K7

Customer PO / PO du Client	Customer Shipper No.	Material Type / Material	Mat'l Heat Code	Lot Number
10534		4130		

## PROCESSING SPECIFICATIONS

SEL HARDEN

HARDEN AND TEMPER

SAE AMS 2759/1 REV.D

Requirement	Specified	Tests Performed	Test Results
HARDNESS	34 - 40 HRC	40	38 - 40 HRC
TENSILE (KSI)	152 - 182 KSI		171 - 182 KSI

Quantity	Weight	Part Number / Part Description
40	141	D2741 BLADE DWG D2741 REV. C 2 BOITES DE CARTON

S  
07/09/10

Operation	Specified Temp	Specified Soak Time	Atmosphere	Carbon Potential	Q-Media Q-Temp	Furnace# Load #	Start Date	Time In	Time Out	Date Complete
1.00 CONT. INIT.	LAVAGE		si nécessaire							
2.00 PREPARING	COMPTAGE									
3.00 PREHEAT 1	1000	1:00 1:30	air			133	10-09-09	5:45	6:45	10-09-09
4.00 SEL HARDE	1575	0:40	SEL		BRINE	106	10-09-09	6:45	7:30	10-09-09
5.00 WASH	150	0:30	soap			150	10-09-09	7:50	8:35	10-09-09
6.00 SNAP TEMF	400	2:00	air			638	10-09-09	8:35	10:55	10-09-09
7.00 DIST INSP										



**METCOR INC.**

560 BOUL. ARTHUR-SAUVÉ  
ST-EUSTACHE, QC, J7R 5A8

Tel: 450-473-1884 / Fax: 450-491-5498

# Certification

Order	Load
151802	1

Customer 215

DART AEROSPACE  
1270 ABERDEEN  
HAWKESBURY

ON K6A 1K7

Shipped To:

DART AEROSPACE  
1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

1

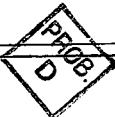
Operation	Specified Temp	Specified Soak Time	Atmosphere	Carbon Potential	Q-Media Q-Temp	Furnace# Load #	Start Date	Time In	Time Out	Date Complete
8.00 TEMPER	875 +/-10°F	2 hrs	air			635	10-12-09	14:25	17:40	10-12-09
9.00 HARDN INS										
10.00 SANDBLAS			Sablage							
11.00 HUILAGE			huile							
12.00 FINAL INSP										10-14-09

## COMMENTS

APPROVED BY:

*Daniel Gouy Pen*

DATE: 2009-10-14



We certify that all the information on this report is exact and in accordance with the order requirements. / Nous certifions que toute l'information comprise sur ce rapport est exacte et conforme aux requis du client.



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

*H286*  
PURCHASE ORDER

Purchase Order ID PO10534

Purchase Order Date 06/10/2009  
PO Print Date 06/10/2009

Page Number 1 of 1

Order From :  
METCOR INC.  
560 BOUL. ARTHUR SAUVE  
SAINT-EUSTACHE, QC J7R 5A8  
CA

VC-MET004

**FAXED**  
07-10-4

Contact Name	Buyer	Chantal Lavoie
Vendor Phone	Requisition Nbr	
Vendor Fax	Tax Resale Nbr	10127-2607
Vendor Account Nbr	Terms	Net 30
	Currency	CAD
	FOB	

Ship To : DART AEROSPACE LTD 1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

Line Nbr	Reference Revision ID	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
Vendor Part Number							
1	51931	<u>D2741 Blade</u>	06/10/2009 Yes	40.00	Purolator ground	\$6.2500	\$250.00

Special Inst: Harden Mat. as per DWG D2741 Rev.C  
Min. Ultimate Tensile Strength = 152 ksi (34-  
401 HRC) Min. Yield Tensile Strength = 141  
ksi. Test report or Cert. required

PO Total:

\$250.00

**CERTIFICATE OF CONFORMITY**  
**REQ'D UPON DELIVERY**

Change Nbr: 1

Change Date: 06/10/2009

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required when applicable

